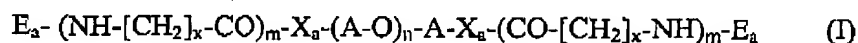


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sausage casing having a residual shrinkage in the range of from 5 to 20% at 80°C, wherein the shrinkage is measured before stuffing, in which the layer or, in the case of multiple-layer casings, at least one of the layers comprises a block copolymer containing "hard" aliphatic polyamide blocks having a glass-transition temperature of from 20 to 80°C and "soft" aliphatic polyether blocks having a glass-transition temperature of from -100 to -20°C, which block copolymer corresponds to one of the formulae I to III



where

A is an alkanediyl radical of the formula

-CH₂-CH₂- (= ethane-1,2-diyl),

-CH₂-CH(CH₃)- (= propane-1,2-diyl) or

-(CH₂)₄- (= butane-1,4-diyl),

X_a is -O- or -NH-,

E_a is H, (C₂-C₈)alkanoyl, benzoyl or phenylacetyl,

CO-N([CH₂)_{x-1}-CH₃)-CO-(C₁-C₄)alkyl,

CO-N([CH₂)_{x-1}-CH₃)-CO-C₆H₅ or

CO-N([CH₂)_{x-1}-CH₃)-CO-CH₂-C₆H₅,

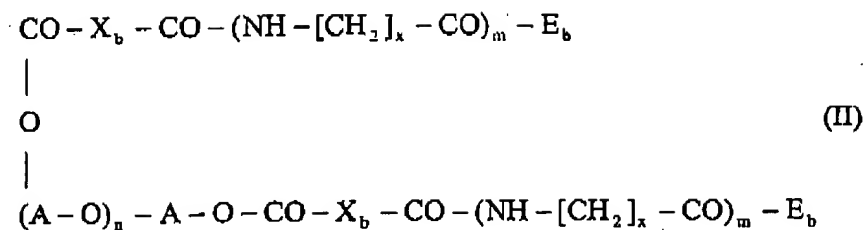
x is an integer from 5 to 11,

m is an integer from 30 to 200 and

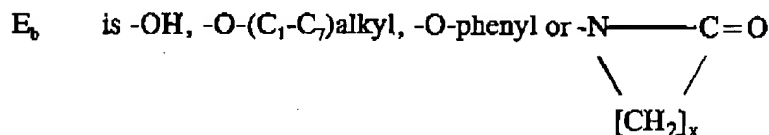
n is an integer from 4 to 60;

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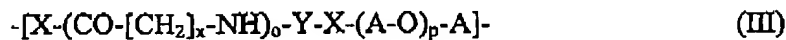
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where

 X_b is an alkanediyl radical of the formula $-\text{[CH}_2\text{]}_z-$,where z is an integer from 4 to 10,*meta*- or *para*-phenylene, $-\text{NH}-(\text{C}_1-\text{C}_6)\text{alkyl}-\text{NH}-$, $-\text{NH}-\text{C}_6\text{H}_3-(\text{CH}_3)-\text{NH}-$, $>\text{N}-[\text{CH}_2]_{x-1}-\text{CH}_3$, $-\text{[CH}_2\text{]}_2-\text{CO}-\text{N}([\text{CH}_2]_{x-1}-\text{CH}_3)-$ or $-\text{C}_6\text{H}_4-\text{CO}-\text{N}([\text{CH}_2]_{x-1}-\text{CH}_3)-$,where C_6H_4 is *meta*- or *para*-phenylene,

and

 A , m and n have the meanings given above;

where

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Y is -CO-, -CO-[CH₂]_z-CO- or -CO-C₆H₄-CO-,
 where C₆H₄ is *meta*- or *para*-phenylene, or is
 -CO-N([CH₂]_{x-1}-CH₃)-CO-,
 -CO-N([CH₂]_{x-1}-CH₃)-CO-[CH₂]_z-CO-N([CH₂]_{x-1}-CH₃)-CO- or
 -CO-N([CH₂]_{x-1}-CH₃)-CO-C₆H₄-CO-N([CH₂]_{x-1}-CH₃)-CO-,
 where C₆H₄ has the meanings specified,

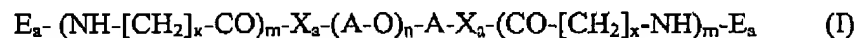
o is an integer from 10 to 150 and

p is an integer from 4 to 100 and

A, x and z have the meanings given above.

Please add the follow new claim:

15 (New). A biaxially stretched and thermoset, tubular, seamless, single-layer or a biaxially stretched and thermoset, tubular, seamless, multiple-layer sausage casing having a residual shrinkage in the range of from 5 to 20% at 80°C, wherein the shrinkage is measured before stuffing, in which the layer or, in the case of multiple-layer casings, at least one of the layers comprises a block copolymer containing "hard" aliphatic polyamide blocks having a glass-transition temperature of from 20 to 80°C and "soft" aliphatic polyether blocks having a glass-transition temperature of from -100 to -20°C, which block copolymer corresponds to one of the formulae I to III



where

A is an alkanediyl radical of the formula

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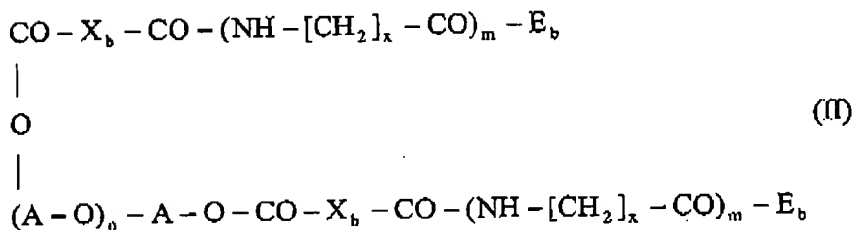
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-CH₂-CH₂- (= ethane-1,2-diyl),-CH₂-CH(CH₃)- (= propane-1,2-diyl) or-(CH₂)₄- (= butane-1,4-diyl),X_a is -O- or -NH-,E_a is H, (C₂-C₈)alkanoyl, benzoyl or phenylacetyl,CO-N([CH₂]_{x-1}-CH₃)-CO-(C₁-C₄)alkyl,CO-N([CH₂]_{x-1}-CH₃)-CO-C₆H₅ orCO-N([CH₂]_{x-1}-CH₃)-CO-CH₂-C₆H₅,

x is an integer from 5 to 11,

m is an integer from 30 to 200 and

n is an integer from 4 to 60;



where

X_b is an alkanediyl radical of the formula -[CH₂]_z-,

where z is an integer from 4 to 10,

meta- or *para*-phenylene,-NH-(C₁-C₆)alkyl-NH-,-NH-C₆H₃-(CH₃)-NH-,

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$$>N-[CH_2]_{x-1}-CH_3, -[CH_2]_2-CO-N([CH_2]_{x-1}-CH_3)-$$
 or

$$-C_6H_4-CO-N([CH_2]_{x-1}-CH_3)-,$$

where C_6H_4 is *meta*- or *para*-phenylene,

E_b is -OH, -O-(C_1 - C_7)alkyl, -O-phenyl or $-N \begin{array}{c} \diagdown \quad \diagup \\ [CH_2]_x \end{array} C=O$

and

A, m and n have the meanings given above;

$$-[X-(CO-[CH_2]_x-NH)_o-Y-X-(A-O)_p-A]- \quad (III)$$

where

Y is -CO-, -CO-[CH₂]_z-CO- or -CO-C₆H₄-CO-,

where C_6H_4 is *meta*- or *para*-phenylene, or is

$$-CO-N([CH_2]_{x-1}-CH_3)-CO-,$$

$$-CO-N([CH_2]_{x-1}-CH_3)-CO-[CH_2]_z-CO-N([CH_2]_{x-1}-CH_3)-CO- \text{ or}$$

$$-CO-N([CH_2]_{x-1}-CH_3)-CO-C_6H_4-CO-N([CH_2]_{x-1}-CH_3)-CO-,$$

where C_6H_4 has the meanings specified,

o is an integer from 10 to 150 and

p is an integer from 4 to 100 and

A, x and z have the meanings given above, wherein the product is produced by a

process comprising:

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D 2 cont'd

preparing a homogeneous melt of a polymer blend containing the block copolymer;

extruding the melt through a heated ring die to form a seamless tube;

rapidly cooling the seamless tube after extrusion to obtain the polymers in an amorphous state, and heating the cooled tube to a blow molding temperature;

stretching the extruded casing by blow molding to form a stretched tube;

partially thermosetting the stretched tube to form the single or multilayer food casing.

16. (New) A casing according to claim 15, wherein the step of extruding the melt through a heated ring die to obtain a seamless tube, further comprises coextruding the polymer blend and another polymer blend through a coextrusion die to obtain a multilayer seamless tube.
